

LC-4400  
WTR-4.00

MEMORANDUM

To: Field Solicitor, Phoenix AZ

From: Robert W. Johnson  
Regional Director

Subject: Information on Colorado River Water Entitlements (Your Memorandum  
Dated September 14, 1995)

We are attaching a discussion paper which responds to the issues raised in the subject memorandum. You may distribute the discussion paper to interested parties outside the Federal government, with the understanding that the paper reflects the current thinking of Reclamation staff on how shortages would be borne among the fourth priority users in Arizona and does not necessarily reflect official policy of Reclamation or the Department of the Interior.

We hope that the discussion paper is responsive to your request.

Attachment

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## DISCUSSION PAPER

The Field Solicitor, Phoenix, Arizona, has requested an explanation of Reclamation's perspective on the relative priorities of the City of Kingman's (Kingman) Colorado River water entitlement that was transferred and assigned to the Mohave County Water Authority (Authority), the Cibola Valley Irrigation and Drainage District (CVIDD) Colorado River water entitlement, and Central Arizona Project (CAP) municipal and industrial (M&I) water. This paper contains the views of Reclamation staff on this issue.

There are two important dates relative to the priority of Colorado River water entitlements within Arizona's annual consumptive use apportionment of 2.8 million acre-feet of Colorado River water. The first date is the effective date of the Boulder Canyon Project Act (June 25, 1929). The Supreme Court Decree of March 9, 1964, in Arizona v. California, and the January 9, 1979, and April 16, 1984, supplements, identified those water users who were using Colorado River water as of that date and quantified their water entitlements. The Decree also identified and quantified the Colorado River entitlements for Federal purposes with a priority date based on when the lands were set aside. Those entitlements having a priority existing as of the effective date of the Boulder Canyon Project Act, which are defined as present perfected rights, have a first call on available Colorado River water during a time of shortage. The second important date is September 30, 1968, the date of enactment of the Colorado River Basin Project Act.

In the Colorado River Basin Project Act, Arizona's right to use its Colorado River apportionment under CAP and other Arizona water delivery contracts entered into after September 30, 1968, was subordinated to California's right to use its 4.4 million acre-feet apportionment during times of shortage. Section 301(a) of the Colorado River Basin Project Act provides as follows: "Article II(B)(3) of the decree of the Supreme Court of the United States in Arizona against California (376 U.S. 340) shall be so administered that in any year in which, as determined by the Secretary, there is insufficient main stream Colorado River water available for release to satisfy annual consumptive use of seven million five hundred thousand acre-feet in Arizona, California, and Nevada, diversion from the main stream for the Central Arizona Project shall be so limited as to assure the availability of water in quantities sufficient to provide for the aggregate annual consumptive use by holders of present perfected rights, by other users in the State of California served under existing contracts with the United States by diversion works heretofore constructed, and by other existing Federal reservations in that State, of four million four hundred thousand acre-feet of mainstream water, and by users of the same character in Arizona and Nevada." (underlining added for emphasis) Because of the reference to existing contracts in the above-quoted language, Reclamation staff believe that it was the intent of Congress that Arizona Colorado River water service contracts and Arizona reservations of Colorado River water that were existing or effective as of September 30, 1968, have priority during times of shortage over Arizona contracts that were not existing as of that date.

The specified entitlements you inquired about fall within what Reclamation refers to as "fourth priority" water within the State of Arizona. In any year

when there is less than 2.8 million acre-feet of Colorado River water available for consumptive use within the State of Arizona, any available water will be delivered to Arizona users in accordance with the following priorities:

First Priority: Satisfaction of present perfected rights (PPRs) as defined and provided for in the Supreme Court Decree in Arizona v. California.

Second Priority: Satisfaction of Secretarial reservations and perfected rights established or effective prior to September 30, 1968.<sup>1</sup>

Third Priority: Satisfaction of entitlements pursuant to contracts between the United States and water users in the State of Arizona executed on or before September 30, 1968. (Note: the second and third priorities are coequal).

Fourth Priority: Satisfaction of post 1968 entitlements pursuant to: (i) contract No. 14-06-W-245 dated September 30, 1972, as amended, between the United States and the Central Arizona Water Conservation District (CAWCD) for the delivery of mainstream water for CAP, including use of mainstream water on Indian lands; and (ii) contracts, Secretarial reservations, and other arrangements between the United States and water users in the State of Arizona entered into or established subsequent to September 30, 1968, for use on Federal, State, or privately owned lands in the State of Arizona (for a total quantity not to exceed 164,552 acre-feet of diversions annually). Entitlements (i) and (ii) above are coequal and any reductions borne by those groups are on a pro rata basis unless otherwise provided by law or regulation or a reduction sharing agreement among the affected parties.

Reclamation has also defined fifth- and sixth-priority water for contracting purposes in Arizona. Fifth-priority water is unused Arizona apportionment water that may be available in any year for use in Arizona because the first through fourth-priority holders do not utilize their entitlements. Sixth-priority water includes surplus water that may be available because the Secretary declares a surplus condition on the Colorado River, because there are excess flows in the mainstream, or because unused apportionment from Nevada or California is made available by the Secretary on an annual basis when users in those States are not utilizing the water. Obviously, it would be difficult to rely on fifth or sixth priority-water where a stable supply is needed over a long period of time.

Under the current priority framework, the fourth-priority right holders in the State of Arizona bear nearly all of the initial shortage for the entire Colorado River system when reductions below 7.5 million acre-feet of consumptive use are required. (It is expected that water users in the State of Nevada would have to absorb 4 percent of the reduction.) The total amount of fourth-priority rights is approximately 1.66 million acre-feet, consisting

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<sup>1</sup>An example of a second priority entitlement includes the Secretarial reservation of Colorado River water for the Cibola National Wildlife Refuge. This reservation carries a 1964 priority date. See the Federal Register notice dated December 9, 1982, page 55430.

of 164,552 acre-feet of diversions contracted to non-CAP users in Arizona and approximately 1.5 million acre-feet for the CAP. It is difficult to assign a specific acre-foot quantity to the CAP entitlement because the CAP master repayment contract essentially provides to CAP the balance of Arizona's apportionment that is not being used by higher priority users or by the other contractors sharing the CAP priority.

In a time of shortage, the initial shortage to be absorbed by Arizona would be prorated between the Arizona contractors with the fourth-priority entitlements (the contractors for the 164,552 acre-feet and the CAP). The details of how the shortage would be prorated have not been established by the Secretary.

The following represents Reclamation staff's view of how the priority scheme would work: If a reduction is required for the fourth-priority users, the first task would be to allocate the reduction between the two groups based on each group's share of the total fourth priority entitlement. The non-CAP and CAP users would bear 9.9 and 90.1 percent of the reduction, respectively, based on the 164,552 and 1.5 million acre-foot (normal year) amounts. Assuming that a reduction of 500,000 acre-feet were required in Arizona, the non-CAP users as a group would bear a 49,429 acre-foot reduction and CAP would bear a 450,571 acre-foot reduction. (Note: a reduction of 500,000 acre-feet in fourth-priority water is consistent with Reclamation's current modeling of hydrologic conditions on the Colorado River during times of shortage.) Under this scenario, the 49,429 acre-foot reduction would be allocated to the non-CAP users on the basis of entitlements. Therefore, CVIDD, with an entitlement to 24,120 acre-feet, would bear a reduction equal to the ratio obtained by dividing 24,120 acre-feet by 164,552 acre-feet, or 14.7 percent. This would work out to a reduction in CVIDD's water of 7.245 acre-feet. Similarly, the Authority would bear a reduction of 9.1 percent of the required shortage (15,000 acre-feet divided by 164,552 acre-feet times 49,429 acre-feet or 4,506 acre-feet). With respect to the CAP, the 450,571 acre-foot reduction would be borne by the non-Indian agricultural users of the Project. If the CAP Indian and M&I uses were at full development at the time of shortage, the non-Indian M&I users would also have to incur part of the reduction imposed on the CAP. At full development, there are only about 350,000 acre-feet of water available for non-Indian agricultural deliveries. Therefore, an additional 100,571 acre-feet of reductions would have to occur on the CAP. Our view is that the 100,571 acre-foot reduction would come out of the non-Indian M&I block of water (the M&I water block between 510,000 and 638,823 acre-feet).<sup>2</sup>

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<sup>2</sup>Even though the Secretary of the Interior has allocated 638,823 acre-feet of CAP water with a M&I priority, only 510,000 acre-feet of that block of water shares the top priority with the amount of water allocated to Indian tribes after deducting 25 percent of the amount allocated to the Gila River Indian Community and 10 percent of the amount allocated to four other Tribes for irrigation purposes. The 1980 CAP water delivery contracts with Indian Tribes contains a formula which clearly indicates that only 510,000 acre-feet of M&I water enjoys the top priority. This was confirmed by the Ak-Chin Water Rights Settlement Act of 1984. In the absence of effluent exchanges between CAP M&I users and Indian tribes, during times of shortage some or all of the M&I water in excess of 510,000 acre-feet is subject to reduction after non-

Therefore, in this case, the non-Indian M&I users would bear a shortage of 100,571 acre-feet, or about a 15.7 percent reduction in the 638,823 acre-foot M&I allocation.

This example illustrates that entities such as CVIDD and the Authority would receive 70 percent of their allocations while the CAP M&I users would receive about 84.3 percent of their allocations. This example confirms that one would be slightly better off with a CAP M&I allocation rather than having some of the 164,552 acre-feet of Colorado River water that shares the post 1968 CAP priority.

The Arizona Department of Water Resources (ADWR) and some of the Arizona contractors disagree with Reclamation's interpretation of how to implement shortages. ADWR believes that classes of users (agriculture or M&I) within the fourth priority share the same priority. In other words, ADWR takes the view that agricultural water contractors that are included in the 164,552 acre-feet of water share the same priority as the CAP agricultural users. Similarly, M&I users that are included in the 164,552 acre-foot amount share the same priority as CAP M&I users. Using the example cited above, CVIDD agricultural use (24,120 acre-feet), Mohave Valley Irrigation and Drainage District agricultural use (35,000 acre-feet of assumed agricultural use for discussion purposes), and CAP agricultural use of 350,000 acre-feet) would be reduced to zero. This would leave about 90,880 acre-feet of reductions to be shared among the non-CAP and CAP M&I users. Based on an assumption of M&I entitlements of 105,432 acre-feet for the non-CAP users and 638,823 acre-feet of CAP M&I entitlements, the non-CAP users would take 14.2 percent of the 90,880 acre-foot reduction or 12,874 acre-feet and the CAP M&I users would take the remaining 85.8 percent of the reduction or 78,006 acre-feet. In this example, the CAP M&I users and other M&I users sharing the CAP priority would receive about 88 percent of their entitlements. ADWR has indicated informally that the M&I users should be able to absorb about a 10 percent reduction in water use during times of shortage and that this result is what the State desires.

Reclamation's interpretation of how the shortage would be implemented is more favorable to the agricultural users such as CVIDD and MVIDD while ADWR's interpretation is more favorable to the M&I users. Reclamation's interpretation provides for some deliveries to the agricultural users such as CVIDD and MVIDD during times of shortage. Under the ADWR interpretation, CVIDD and MVIDD would be "shut down" during shortages. Even though the CAP non-Indian agricultural users would receive no CAP water during times of shortage, they could pump ground water and remain in business. No such option would be available to CVIDD and MVIDD under the ADWR view of how the shortage should be implemented.

Reclamation is willing to discuss alternative methods of implementing a shortage with some or all of the fourth-priority users and ADWR. If a consensus plan could be reached among the fourth-priority users for an

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Indian agricultural use has been reduced to zero. This reduction would occur before any reduction would be imposed on the CAP Indian tribes.

alternative shortage procedure. Reclamation would be inclined to implement such a procedure. In the future, it is conceivable that innovative concepts such as marketing and banking of Colorado River water could render the shortage dilemma discussed herein moot.

It should be emphasized that the type of shortage discussed herein is not imminent. Reclamation believes that it will be 20 to 30 years before such a shortage situation could occur.

This paper represents the best view at this time as to how Reclamation staff see "mild" shortages on the Colorado River system being implemented. This paper does not constitute official Reclamation or Departmental policy on this issue. It needs to be emphasized that differences of opinion exist in the Lower Basin water community as to how shortages should be implemented on the Colorado River system and within the CAP. When shortages do occur on the Colorado River system, and if the affected parties cannot reach consensus on how the shortage will be implemented, the Secretary will have to deal with the shortage at that time based on the best information then available and his or her interpretation of the "law of the Colorado River," after consulting with the water users and Lower Basin States in accordance with Article II(B)(3) of the Supreme Court Decree.